

IN THE CLAIMS

1. (Currently Amended) ~~In a mMethod for spraying an aqueous liquid into the air intake~~
~~a duct (2) to a turbocharger (4) for intake air~~ of a turbocharged piston engine (1) for
humidifying the intake air, whereby to reduce nitrogen oxide emissions from the engine,
characterized in that, the improvements wherein:

in a first stage ~~in the method~~, the intake air is heated by a heat exchanger element (5')
before the turbocharger and ~~water mist~~ first of the aqueous liquid is first injected as a mist
into the air heated intake duct ~~after the first heating stage~~ air through at least one first nozzle
(9,10), ~~that ; and~~

in a second stage, the first-injected intake air is compressed by the turbocharger (4),
causing its temperature to rise, and ~~water mist~~ second of the aqueous liquid is second injected
as a mist into the air compressed intake duct ~~air~~ through at least one second nozzle (12, 13)
~~after the second stage.~~

2. (Currently Amended) Method according to claim 1, characterized in that the amount
of ~~water~~ aqueous liquid supplied by the nozzles is adjusted according to the load and/or speed
of rotation of the engine.

3. (Currently Amended) ~~In s~~Spraying apparatus for humidifying the intake air of a
turbocharged piston engine (1) having a turbocharger, whereby to reduce nitrogen oxide
emissions from the engine, said apparatus the improvements comprising:

at least one first nozzle for spraying an aqueous liquid into ~~the air intake~~ a duct (2) to
the turbocharger for the intake air; and, characterized in that the apparatus comprises

at least one heating element (5') for heating the intake air ~~before the turbocharger (4)~~

and in the duct, wherein the at least one first nozzle (9,10) ~~for spraying an aqueous liquid mist into the air intake duct after~~ is between the heating element (5') and the turbocharger.

4. (Original) Spraying apparatus according to claim 3, characterized in that the apparatus comprises at least one second nozzle (12,13) for spraying an aqueous liquid mist into the air intake duct (2) after the turbocharger (4).

5. (Previously Presented) Spraying apparatus according to claim 3, characterized in that the apparatus comprises valve elements (13,14) used to control and/or to open/close the liquid flow passage leading to the nozzles (9- 13).

6. (Previously Presented) Spraying apparatus according to claim 3, characterized in that at least one first intake air heating element (5') is a heat exchanger element.

7. (Previously Presented) Spraying apparatus according to claim 3, characterized in that at least one second device heating the intake air is an intake air compressor (4).

8. (Previously Presented) Spraying apparatus according to claim 3, characterized in that the apparatus comprises control equipment by means of which the spraying action of at least some of the nozzles (9-12) can be controlled.

9. (Previously Presented) Spraying apparatus according to claim 3, characterized in that the droplet size of the liquid mist is usually below 200 micrometers.

10. (Previously Presented) Spraying apparatus according to claim 3, characterized in that the pressure in the liquid supply piping is 10-300 bar.